1 7 ;

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

All currently pending claims are listed below for the convenience of the Examiner. Please amend claims 1, 6, 9, 11, and 14, as follows:

(Currently amended) A method for image processing comprising:
 obtaining stereo data based on input image sequences, including obtaining stereo data
 based on input image sequences of varying facial expressions;

building a three-dimensional (3D) model using the obtained stereo data; and tracking a monocular image sequence using the built 3D model.

- 2. (Canceled) The method of claim 1, wherein the obtaining of the stereo data includes obtaining stereo data based on input image sequences of varying facial expressions.
- 3. (Original) The method of claim 1, wherein the building of the 3D model includes processing the obtained stereo data using a Principal Component Analysis (PCA).
- 4. (Original) The method of claim 3, wherein the processed stereo data using PCA allows the 3D model to approximate a generic shape as a linear combination of shape basis vectors.



- 5. (Original) The method of claim 1, wherein the tracking of the monocular image sequence includes tracking of a monocular image sequence of facial deformations using the built 3D model.
- 6. (Currently amended) A computing system comprising:

 an input unit to obtain stereo data based on input image sequences of varying facial expressions; and

a processing unit to build a three-dimensional (3D) model using the obtained stereo data and to track a monocular image sequence using the built 3D model.

- 7. (Canceled) The computing system of claim 6, wherein the input unit is to obtain the stereo data based on input image sequences of varying facial expressions.
- 8. (Original) The computing system of claim 6, wherein the processor is to process the obtained stereo data using a Principal Component Analysis (PCA).

Helbert.

- 9. (Currently amended) The computing system of claim <u>86</u>, wherein the processor is to approximate a generic shape as a linear combination of shape base vectors based on the PCA processed stereo data.
- 10. (Original) The computing system of claim 6, wherein the processor is to track a monocular image sequence of facial deformations using the built 3D model.

11. (Currently amended) A machine-readable medium providing instructions, which if executed by a processor, causes the processor to perform an operation comprising:

obtaining stereo data based on input image sequences, including obtaining stereo data based on input image sequences of varying facial expressions;

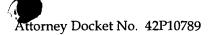
building a three-dimensional (3D) model using the obtained stereo data; and tracking a monocular image sequence using the built 3D model.

- 12. (Canceled) The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising: obtaining stereo data based on input image sequences of varying facial expressions.
- 13. The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

 processing the obtained stereo data using a Principal Component Analysis (PCA).
- 14. (Currently amended) The machine-readable medium of claim 131, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:

approximating a generic shape as a linear combination of shape basis vectors based on the processed stereo data using PCA.

15. (Original) The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, causes the processor to perform an operation comprising:





HOLD 1

tracking of a monocular image sequence of facial deformations using the built 3D model.

Same

AND TOPS